

## **ABSTRACT**

Dental anesthetic injection apparatus and methods for administering dental injections are disclosed. One embodiment comprises a portable device comprising a foot pedal, a control unit and a delivery head which receives a disposable cartridge of dental anesthetic and connects with a disposable syringe kit. The portability of this unit facilitates placing the dental cartridge within the dentist's field of vision while administering an injection. This and other embodiments provide a pen-grip type of needle grip which is movable independently of the anesthetic cartridge, and a programmable flow rate. Other embodiments comprise delivery heads mountable on dental equipment or fixtures, such as the dental chair.